

SBM34AVAF-C

Surface Mount Extreme Low Vf Schottky Barrier Rectifier

Voltage **45 V** **Current** **3 A**

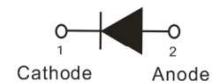
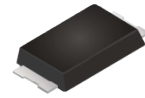
Features

- Extreme low forward voltage drop
- Low power loss, high efficiency
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC61249 Standard

Mechanical Data

- Case : SMAF-C plastic
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.0012 ounces, 0.034 grams

SMAF-C



Maximum Ratings and Thermal Characteristics (T_A = 25°C unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	45	V
Maximum RMS Voltage	V _{RMS}	32	V
Maximum DC Blocking Voltage	V _R	45	V
Maximum Average Forward Rectified Current	I _{F(AV)}	3	A
Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load	I _{FSM}	80	A
Typical Junction Capacitance Measured at 1 MHz And Applied V _R = 4V	C _J	220	pF
Typical Thermal Resistance (Note 1)	R _{θJL}	20	°C/W
	R _{θJA}	150	
Operating Junction Temperature Range	T _J	-55 to +150	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C



SBM34AVAFc

Electrical Characteristics ($T_A = 25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Forward Voltage	V_F	$I_F = 1\text{ A}, T_J = 25^{\circ}\text{C}$	-	0.34	-	V
		$I_F = 3\text{ A}, T_J = 25^{\circ}\text{C}$	-	0.42	0.47	
		$I_F = 1\text{ A}, T_J = 125^{\circ}\text{C}$	-	0.26	-	
		$I_F = 3\text{ A}, T_J = 125^{\circ}\text{C}$	-	0.39	-	
Reverse Current ^(Note 2)	I_R	$V_R = 36\text{ V}, T_J = 25^{\circ}\text{C}$	-	20	-	uA
		$V_R = 45\text{ V}, T_J = 25^{\circ}\text{C}$	-	-	210	
		$V_R = 45\text{ V}, T_J = 125^{\circ}\text{C}$	-	7	-	mA

NOTES:

1. Mounted on a FR4 PCB, single-sided copper, standard footprint
2. Short duration pulse test used to minimize self-heating effect

SBM34AVAFC

TYPICAL CHARACTERISTIC CURVES

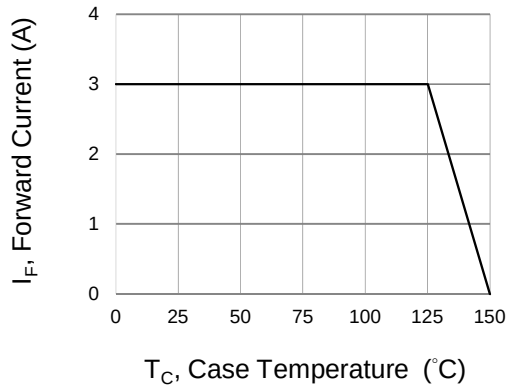


Fig.1 Forward Current Derating Curve

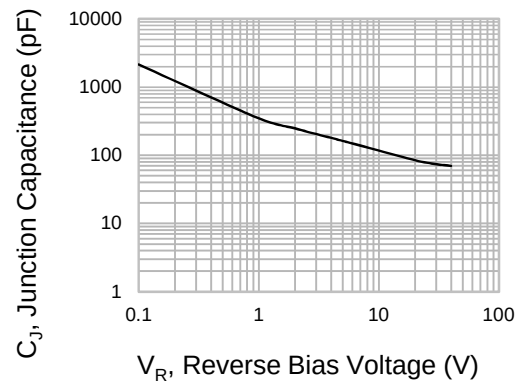


Fig.2 Typical Junction Capacitance

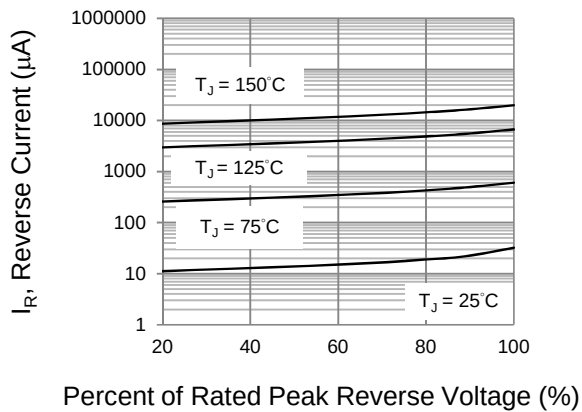


Fig.3 Typical Reverse Characteristics

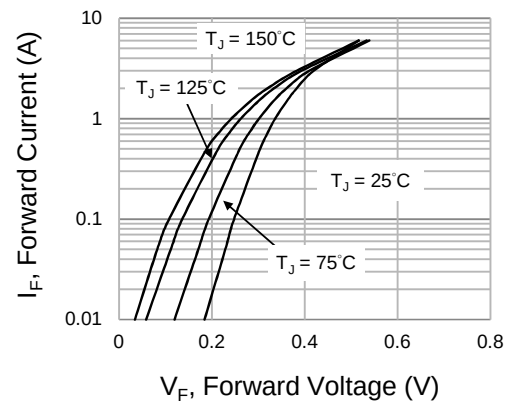


Fig.4 Typical Forward Characteristics

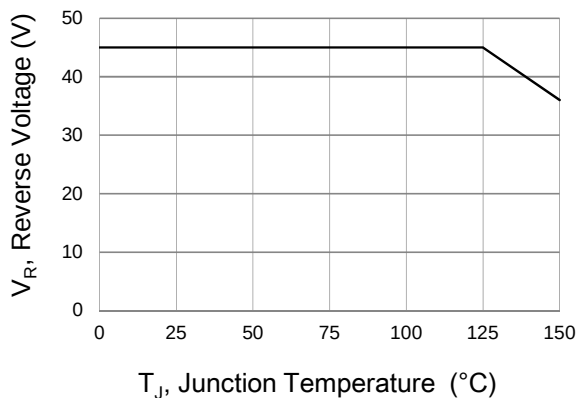


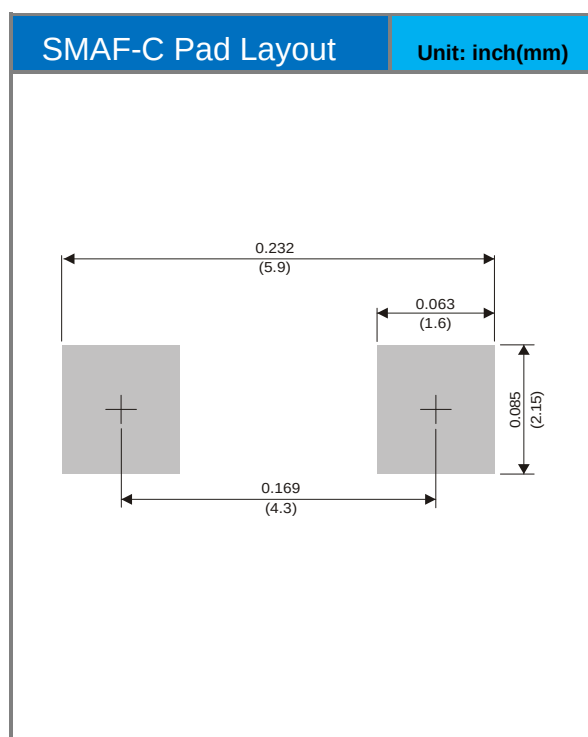
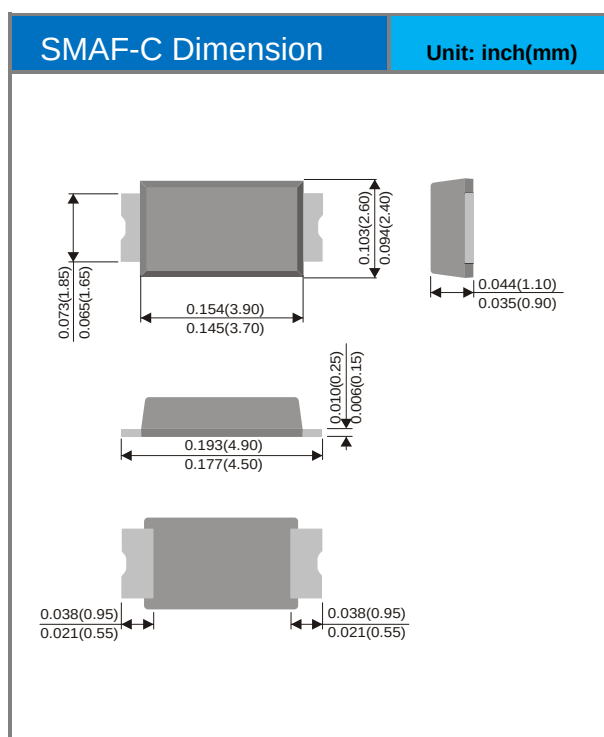
Fig.5 Operating Temperature Derating Curve

SBM34AVAF-C

Part No. Packing Code Version

Part No. Packing Code	Package Type	Packing Type	Marking	Version
SBM34AVAF-C_R1_00001	SMAF-C	3K / 7" reel	SBM34AV	Halogen free

Packaging Information & Mounting Pad Layout





SBM34AVAF

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